

## ABSTRACT

The invention provides a catalyst for catalytic reduction of nitrogen oxides contained in exhaust gases wherein fuel is supplied and subjected to combustion under periodic rich/lean conditions and the resulting exhaust gases are brought into contact therewith, which catalyst comprises: (A) a catalyst component A comprising (c) ceria or (d) praseodymium oxide or (e) an oxide and/or a composite oxide of at least two elements selected from the group consisting of cerium, zirconium, praseodymium, neodymium, terbium, samarium, gadolinium and lanthanum; (B) a catalyst component B comprising (d) a noble metal catalyst component selected from the group consisting of platinum, rhodium, palladium and oxides thereof and (e) a carrier; and (C) a catalyst component C comprising (f) a solid acid, and (g) a solid acid supporting an oxide of at least one element selected from the group consisting of vanadium, tungsten, molybdenum, copper, iron, cobalt, nickel and manganese.

The catalyst reduces NOx contained in exhaust gases wherein fuel is supplied and subjected to combustion with a periodic rich/lean excursions, whereby NOx is generated in the exhaust gases, with high durability in a wide temperature range even in the presence of oxygen, sulfur oxides or water.